Patent

Attorney Docket: 270/098

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:		) Group Art Unit: 1733 (parent)
J. Sauer		
Serial No.:	Not yet assigned	) Examiner: J. Gallagher (parent)
Filed:	Herewith	)
For:	METHOD OF TREATING AN ALUMINUM SURFACE	) ) ) )

## PRELIMINARY AMENDMENT

## **BOX PATENT APPLICATION**

Commissioner for Patents Washington, D.C. 20231

Sir:

Applicant requests entry of the following amendments prior to examination on the merits.

IN THE TITLE

Please replace the title ("Surface Treatment") with the following title:

Method Of Treating An Aluminum Surface

**IN THE SPECIFICATION** 

Page 1, please add the following paragraph after line 1 ("Surface Treatment"):

-- This application is a continuation of 08/860,762 filed on July 11, 1997.--

Page 9, line 1, please replace the first paragraph ("Claims") with the following:

--I claim:--

IN THE ABSTRACT

Please replace the abstract with the following abstract, provided on a separate sheet:

--A process for surface pretreatment, including providing a clean metal

surface which is aluminum or an aluminum alloy; applying a composition

including an organosilane to the clean metal surface to form a coated surface; and

exposing the coated surface to a laser which produces an elevated temperature on

the coated surface.--

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#### **IN THE CLAIMS**

Please cancel claims 1-8 without prejudice or disclaimer.

Please add the following new claims:

- 9. (New) A process for surface pretreatment, comprising the following steps in the order shown:
  - (a) providing a clean metal surface which is aluminum or an aluminum alloy;
  - (b) applying a composition comprising an organosilane to the clean metal surface to form a coated surface; and
  - (c) exposing the coated surface to a laser which produces an elevated temperature on the coated surface.
- 10. (New) A process according to claim 9, wherein the organosilane has the general formula I:

$$R_n Si(OR^1)_m$$

wherein

R is a reactive or non-reactive organic group;  $R^1$  is alkyl, alkoxyalkyl, or acyl; n is 1 or 2; and

m is 2 or 3, provided that n + m = 4.

- 11. (New) A process according to claim 9, wherein the composition is a solution containing from 1 to 10 % by weight of the organosilane in water and/or an organic solvent.
- 12. (New) A process according to claim 9, wherein the composition further comprises a carboxylic acid and/or a nonionic wetting agent.
- 13. (New) A process according to claim 9, wherein the metal surface is cleaned by degreasing with an organic solvent.
- 14. (New) A process according to claim 9, wherein the laser is a non-focussed laser.
- 15. (New) A process according to claim 10, wherein R is alkyl, phenyl, vinyl, acrylatoaklyl, glycidyloxyalkyl, wherein alkyl means  $C_1$ - $C_4$  alkyl.

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- 16. (New) A process according to claim 10, wherein  $R^1$  is  $C_1$ - $C_4$  alkyl,  $C_2$ - $C_8$  alkoxyalkyl, or  $C_2$ - $C_4$  acyl
- 17. (New) A process according to claim 16, wherein R<sup>1</sup> is methyl, ethyl, methoxyethyl, or acetoxy.
- 18. (New) A process according to claim 16, further comprising the step of bonding the coated and lased metal surface to a second surface with an adhesive.

#### **REMARKS**

Upon entry of this amendment, claims 1-9 will be pending.

Claims 1-8 have been canceled. The specification has been amended to add a claim of priority to U.S. Patent Application No. 08/860,762. No new matter has been added.

Applicant draws the Office's attention to the Examiner's Statement of Reasons for Allowance in the Notice of Allowability dated September 17, 2001, in parent application 08/860,762: "The applied art of record is held not to fairly document the laser treatment of a silane primed aluminum substrate prior to adhesive bonding."

Applicant submits that this application is now in condition for examination on the merits. If the Office has questions, the Office is invited to call Applicant's Representative directly at (202) 974-6018.

Please charge or credit Deposit Account No. 12-2475 for all fees as needed.

Respectfully submitted,

LYON & LYON LLP

Dated: 5-DEC-2001

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# ABSTRACT OF THE DISCLOSURE

A process for surface pretreatment, including providing a clean metal surface which is aluminum or an aluminum alloy; applying a composition including an organosilane to the clean metal surface to form a coated surface; and exposing the coated surface to a laser which produces an elevated temperature on the coated surface.